DOCUMENT RESUME

ED 312 861 EC 221 320

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TITLE The Three R's of Staff Development: Reality, Relevance, and Relationships.
PUB DATE 7 Apr 89
NOTE 21p.; Paper presented at the Annual Convention of the Council for Exceptional Children (67th, San Francisco, CA, April 3-7, 1989).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Change Strategies; *Disabilities; Elementary Secondary Education; *Faculty Development; Inservice Teacher Education; Postsecondary Education; *Special Education Teachers; Teacher Improvement; *Teacher Role; Teaching Methods
IDENTIFIERS *Program for Effective Teaching

ABSTRACT

This study investigated the nature of change in nine rural special education resource room teachers, after they had participated in a comprehensive, system-wide staff development program in the principles of effective teaching using the Program for Effective Teaching. Data were gathered through classroom observations, teacher assessments of educational beliefs and sense of teaching efficacy, and ethnographic interviews. Following training, most of the teachers continued to utilize classroom management patterns that were consistent with their original procedures. Those that were using group and teacher-directed instruction routinely before training tended to continue or increase the use of such structures. Also analyzed were the teachers' use of explanation, demonstration, and assignments; teachers' sense of efficacy; and the strength and nature of teacher beliefs. Teachers who found the training model consistent with their role perceptions and philosophy tended to incorporate the model into their teaching procedures. It is concluded that it is necessary for trainers to consider entry behaviors and beliefs when planning comprehensive change efforts. The success of special education staff development in promoting change was found to be affected by several factors--relevance, mutual adaptation in real settings, supportive relationships, and attention to the issues of integration and communication. (JDD)

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THE THREE R'S OF STAFF DEVELOPMENT: REALITY, RELEVANCE, AND RELATIONSHIPS

Council for Exceptional Children, San Francisco, April 7, 1989

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The provision of effective staff development is a critical component in the efforts to improve our nation's schools. This is particularly true in the field of special education as inservice training programs are used to upgrade skills of teachers of the handicapped. Determination of factors that promote or inhibit change efforts with this special population of teachers should help trainers maximize the effectiveness of staff development efforts that have individual or system-wide change as their goal. Just as special educators seek to improve the skills of their learners, it is critical that persons involved in staff development of teachers throughout their careers use the most effective ways of disseminating new methods and approaches. If there are role, context, or individual-specific factors that interact positively or negatively with staff development and change efforts, then special education administrators must consider these relationships if training is to be effective in upgrading the skills of teachers serving students with special learning needs.

This study investigated the nature of change in a group of rural special education resource room teachers after they had participated in a comprehensive, system-wide staff development program in the principles of effective teaching. Specific outcomes predicted from

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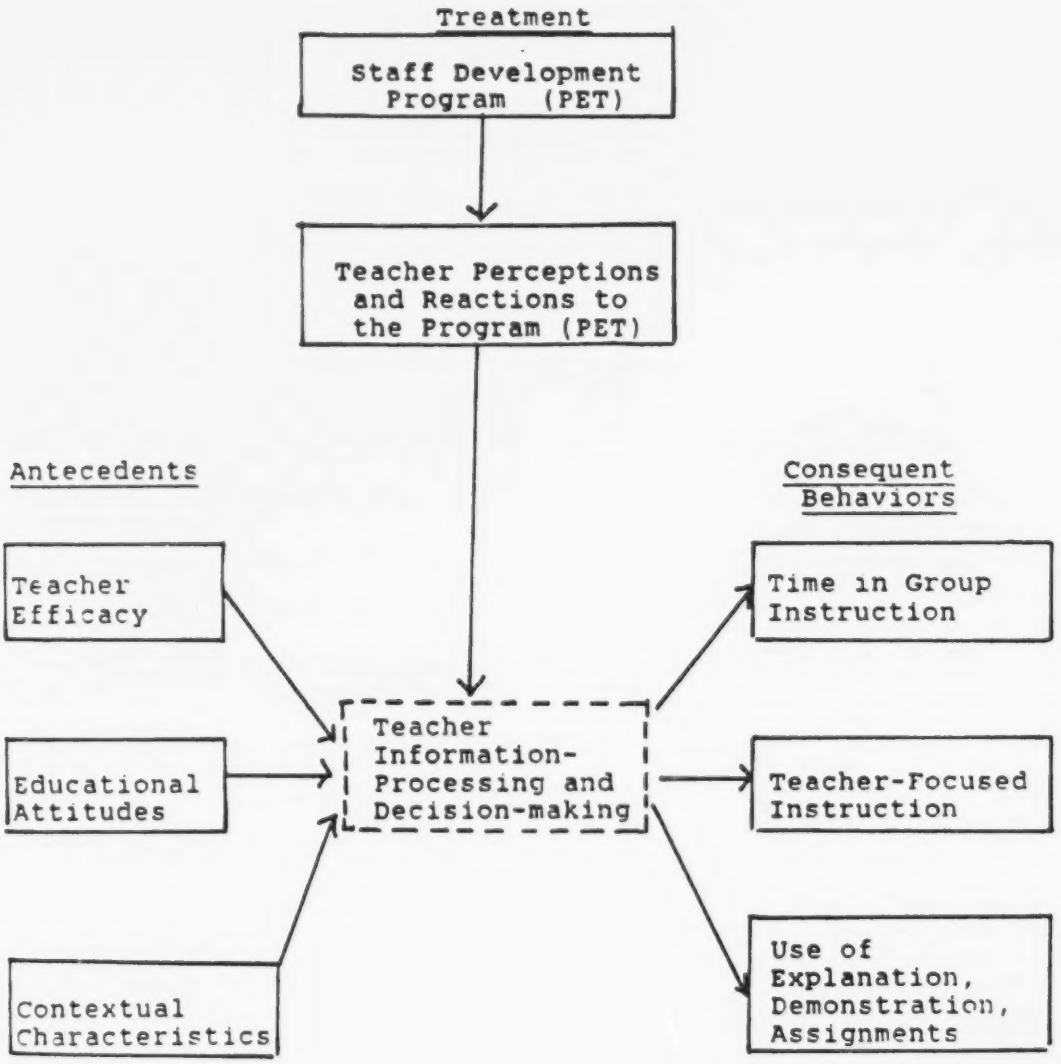
the content of the training program, the Program for Effective Teaching (PET), included an increase in teacher-directed instruction and the use of group formats, accompanied by a reduction in the amount of time students work alone without teacher interaction. It was also expected that following training, the special educators would utilize more teacher-controlled explanation and demonstration and would conduct guided activities prior to assigning independent practice.

The relevant literature had indicated that individual teacher characteristics such as educational beliefs and sense of efficacy might interact with staff development programs, producing disparate results. This study sought to define those relationships with respect to the change process. Additional factors were also identified which may affect the outcome, including the context-specific characteristics of the work environment of these teachers and their reactions to the PET training process.

This year-long study of teacher change involved nine resource room teachers from four rural counties who completed an intensive six-week program in effective teaching practices, modeled after the work of Hunter. They were observed for extended periods before and after training. They completed survey instruments to assess their educational beliefs and sense of teaching efficacy. At the end of the study, an ethnographic interview was held with each teacher to explore their feelings about their roles and the staff development process in which they had participated. Ethnographic data collection and analysis techniques were used to investigate the interaction of two individual teacher variables - educational beliefs and the sense of efficacy - with the training program and the resultant variation in effects. (See Figure.)

Figure. Conceptualization of the study.



During the course of the study, a picture of the resource room teacher developed from the data. The special educator often works in a sub-standard facility with a lack of materials and little administrative support from the building or district level. They carry out their function of serving their learners with special needs behind closed doors and interact little with the rest of the school community.

The typical resource room professional has a clear sense of mission, which may be to enhance student affective development, to diagnose and remediate deficits, or to support the child in the regular curriculum. This mission defines the functioning of that special education teacher in the school and in some ways further sets the individual apart from the general school mission.

The teachers also communicated a clear sense of difference in their professional relationships, a sense of "they versus me (us)." This difference exists between special and regular education, and between teacher and administrator. The result of this is a sense of alienation and a feeling that issues and procedures that pertain to the general school community do not really relate to or affect the special educator. The relationship occasionally even takes on an adversarial tone as special educators feel compelled to advocate for their students against the system.

The special educators hold a high opinion of their personal teaching efficacy and a low opinion of teaching in general. This may stem from the fact that their student population is composed of the learners that the system has failed. Teachers who do not feel that they have something special to offer these failed students would not remain in this area of specialization for long. This difference in efficacy beliefs further accentuates the sense of

difference between regular and special education.

Finally, these teachers have a strongly-held and central belief in the importance of individual student needs and an emphasis on the learning process, as opposed to a teacher directive and content orientation. They refer to these beliefs often when they discuss what they do in their jobs. The student takes precedence over everything else. If a new idea or practice is not consistent with this orientation, the tendency is for it to be rejected.

The implication for persons involved in system-wide staff development or change efforts is that there are populations of teachers such as these special education resource room teachers who by virtue of their roles and beliefs present unique profiles of behavior and attitude. Generic teaching methods or processes will fail to reach many of these teachers who view the proposal as inappropriate in their special contexts. The prior determination of the relevance of any proposal helps the teacher decide if it should be given further attention. For these reasons, staff development professionals would be advised to tailor their efforts to the population being addressed in specific terms so that the relevance and applicability become clear. The likelihood of implementation and adoption will be enhanced by this extra effort.

Training and the Subsequent Use of Teacher-Directed Instruction

When the teachers were sorted according to initial observation data regarding their use of time in various organizational formats, it was found that, following training, most of the teachers continued to utilize classroom management patterns that were consistent with their original procedures. Those that were using group and teacher-directed instruction routinely before training tended to continue or increase the use of such structures. Those

who originally allocated high percentages of their time to one-to-one teaching or had their pupils work independently for significant periods of time tended to maintain those formats despite training.

From the classroom observations, it became apparent that some of the teachers changed following staff development and some did not. In addition, not all of the changes were in the predicted direction. Teachers who found the model consistent with their role perceptions and philosophy tended to incorporate the model into their teaching procedures. Three of the nine teachers changed in directions that were congruent with the staff development model, but eight of them made changes that were congruent with their own role perceptions or beliefs.

The implication is clear. Teachers evaluate a new approach or idea by comparing it with their current methods, and they determine its value by its congruence with behaviors and beliefs that have become established in their repertoire. Francis Bacon wrote many years ago:

> The human understanding when it has adopted an opinion, either as being the received opinion or as being agreeable to itself, draws all things else to support and agree with it. And although there be a greater weight of instances to be found on the other side, yet these it either neglects or despises, or else by some distinction sets aside; in order that by this great and pernicious predetermination the authority of its former conclusions may remain inviolate. (Bacon, cited in Curtis & Greenslet, 1945, p. 16)

Adoption of changed behavior is more often determined by the interaction of the new ideas with previously established behaviors and role definitions than it is by the weight of new evidence or training. It is necessary for trainers to consider entry behaviors and beliefs when planning comprehensive change efforts such as the PET staff development program.

The effect of differential reaction to the PET training process itself on the outcome behaviors was investigated as a mediating factor in the change process. The interviews revealed that five of the teachers felt that PET was relevant to their settings and that they enjoyed the training process; these teachers changed some of their behaviors, resulting in increased use of time for teacher-directed instruction and group instruction. Four teachers indicated that the program was "all right, but" it did not relate to their situations; those teachers showed a pattern of decreased time usage on the two measures of instructional organization following training.

The data do not specifically identify the factors that influence a sense of relevance and acceptance, but a combination of antecedent and concurrent elements may be interacting to produce the effect. The teacher's prior beliefs, experiences, and standard procedures may support the information received and promote a sense that this new information fits in with a previously established conceptual framework. It is also possible that during the training, some concept, experience, or interaction was perceived by the participant as particularly convincing, creating a positive attitude toward the model which translated into adoption. Conversely, several of the teachers who expressed resistance to the model mentioned problems with mechanical or logistical issues related to the observation/ coaching aspect of the program. When a trainer required that a teacher make a drastic change, such as using a group size that was not usual in that setting, it confirmed the irrelevance of the training for that teacher, a fact which may have lead the teacher to resist change in the desired direction. Overly restrictive interpretation of training elements and a failure to accommodate

teacher decision-making and adaptation of the techniques to the specific setting of the resource room created further resistance and, consequently, less change.

The conclusion is that although some change did occur following comprehensive staff development, most of these special education teachers did not change significantly but rather maintained behaviors that they believed to be adaptive in their contexts. They acted in a manner that was consistent with the role perceptions that they held. The inflexibility of the model to accommodate contextual differences that were specific to the resource room lead the teachers to discount the model entirely in most cases. The teachers' reactions to the training, including an assessment of its relevance in their positions, was an indicator of the potential for change. Staff development and change efforts in general need to consider the antecedent factors of experience, behavior, belief, and context, as well as the concurrent issue of reaction to the training process itself if desired goals are to be achieved.

Training and Teachers' Use of Explanation, Demonstration, and Assignments

The staff development program that was used as the treatment in this study placed great emphasis on teacher control of instruction. Specifically, teachers were told that "explanation is in their hands." They were taught that definitions, content, and examples should be supplied by the teacher to prevent inaccurate student learning, and that they have the responsibility for describing and modeling processes involved in the learning. Guided practice was expected to precede independent work by students, and no student should work independently until the teacher was assured that sufficient skill has been acquired. Explanation, demonstration, and

appropriate use of assignments form the basis for the prescribed lesson structure in the PET model.

During observations in the resource rooms, information was recorded concerning the occurrence and qualitative nature of each teacher's use of explanation, demonstration, and use of assignments. Analysis of the field notes demonstrated that teachers who originally scheduled more of their students in group instruction formats also tended to change their use of explanation, demonstration, and use of assignments in a direction that was congruent with the training model. Teachers who initially used high levels of independent work with their pupils continued in that pattern, providing little direct explanation or demonstration but often using questioning, prompts, and cues to lead students in the completion of assignments. Adoption of the promoted behaviors was again related to the teacher's reaction to the training procedures.

The results of this analysis highlighted the fact that change takes place in different forms. The data revealed that the participants assimilated change differently. Some who did not appear to make the connection between PET training and the value of teacher-directed instruction nevertheless incorporated some of the concepts of instructional practice into their established patterns of behavior. These teachers, who used more direct explanation when they worked individually with students following training, were demonstrating the phenomenon of selective utilization of information or adaptation of techniques according to the demands of their roles and contexts. In discussing information processing theory, Joyce (1978-79) noted that individuals tend to develop systems for directing their daily work activities and that they use new information to make modifications to those systems rather than

making radical changes. In evaluating the success or effect of a change effort, these smaller, qualitative shifts in behavior serve as indicators that staff members are processing the information as presented and then altering the components to meet their current needs. This adaptive process constitutes change and demonstrates a receptivity of the educator to experiment with the innovation, tendencies that should be acknowledged and encouraged.

Teacher Sense of Efficacy and the Nature of Change

The resource teachers in this study presented a distinct profile with regard to the construct of teacher efficacy. As a group they indicated that they strongly believed that they personally could execute the behaviors necessary to enhance student learning. Their evaluation of the efficacy of teaching in general, however, ranged from mildly negative to mildly positive. All of the teachers except one indicated a higher sense of personal efficacy than they ascribed to educators in general, these two measures being strongly negatively correlated. One interpretation, without attribution of causality, is that as these teachers became more pessimistic about the capability of the teaching profession to overcome other negative influences in students' lives, they developed a higher regard for the specialized skills they had developed for helping learners with problems.

During the interview process, the teachers in the sample often mentioned their confidence in the procedures they used and that they tried to get regular educators to adopt these methods as well. Lack of success in achieving program goals was usually attributed to external forces such as inflexibility of regular classroom teachers, inadequate materials or support, and large caseloads rather than a lack of skill on their part. The picture that emerged is of a group

of teachers who have set themselves apart from the mainstream of the school function. They described themselves either as solutions to problems or as victims of circumstance. They held fast, however, to their belief in their specialized knowledge and insight.

Site-ordered effects matrix analysis of the interactions of teacher efficacy and observed behavior changes revealed no consistent pattern of change. There was a tendency for teachers who had low scores on the measure of general teaching efficacy to utilize more teacher-directed instruction following training, possibly indicating an increased awareness promoted by the staff development model that procedures do exist by which teachers can be more effective instructionally.

Moderate correlations of the two measures of efficacy and pupil-time spent working independently raises some interesting implications. Although causal relationships cannot be inferred, the correlation (r= -.59) of higher teaching efficacy with lower amounts of independent work is consistent with the theory promoted in the PET model that teachers are effective only when they teach. The moderate positive correlation (r= .67) between independent work and personal efficacy is harder to interpret. One possible explanation is that these teachers felt that their individual work with a student was effective enough that it justified having other students spend time working alone to allow this time for individualization. Frequent comments from the teachers about the importance of one-to-one teaching and of allowing students to work at their own level and pace lend support to this interpretation.

The literature had indicated that there would be a strong connection between levels of efficacy and effects after staff development. This study failed to identify such effects. The

restricted range of scores of this homogeneous sample may have prevented the identification of an effect which might have been demonstrated in a larger, more heterogeneous population. The finding that this population which holds relatively equivalent levels of efficacy also demonstrated a fairly uniform change profile is, however, consistent with the proposition that similar efficacy levels may predict similar responses to staff development, although the findings must be considered as suggestive only.

The Strength and Nature of Teacher Beliefs and the Nature of Change

Behavior is described by some as the externalization of beliefs held by an individual. What teachers believe has been shown to affect the procedures they adopt in their classrooms. The teachers in the sample were highly positive in their beliefs concerning the importance of the individual student and learning theory in the educational process. On the measure of the value of teacher-direction of classroom activities, they responded more negatively, with only three teachers indicating mild positive agreement with the propositions.

The few moderate correlations of belief measures with observed behavior indicated that teachers who agreed with teacher-directive belief statements tended to use more teacher-directed and group formats both before (r = .63) and after r = .55) training. Teachers who expressed strong concurrence with student/learning centered beliefs were slightly more likely to have students work independently and to use individual instruction (r = .61). These results are consistent with the hypothesis that belief systems are related to an individual's behavior and response to change.

In this study, the staff development model being used promoted a teacher-directive model of education. Qualitative analysis of the

relationship of change with beliefs indicated that teachers who held beliefs that were congruent with that approach were somewhat more likely to change both in organizational formats and in instructional practices such as explanation, demonstration, and use of assignments. Those teachers who held strong and incongruent beliefs (i.e., highly positive student/learning centered beliefs) were observed to change the least and in some cases even seemed to modify their behavior in the opposite direction. The implication of these findings is that resistance to change proposals may be predicted if a group of teachers holds an educational philosophy or belief orientation that is significantly different from that which guides the innovation. Teachers who appear to agree with the basic tenets of the program prior to implementation can be expected to be more receptive to and to accommodate the changes more fully.

Rokeach (1968) in discussing principles of belief adoption and change concluded that it takes overwhelming evidence to change beliefs that are strongly-held and central in an individual's belief system. Any new proposition is measured against the yardstick of prior beliefs. The results of the current study suggested that special educators who are similar to the sample teachers in presenting a fairly strong student/centered belief profile may be resistant to and see limited relevance in their settings of the more prescriptive, teacher-controlled teaching models being promoted by this and similar staff development programs. The incongruity of the suggested practice or philosophy of teaching with the student/learning centered dimension may have increased the probability of rejection of the new practice by this special population of teachers.

Implications for Educational Practice

The success of staff development in promoting change is affected by several factors - relevance, mutual adaptation in real settings, and supportive relationships. In addition, work with special education teachers appears to require additional attention to issues of integration and communication. The resource room teachers in this study defined their roles and themselves as very separate entities within their schools, and this appeared to compound the problem of effective staff development using a general district model. The conclusion is that for staff development to be effective, the participants must see it as relevant to the real world in which they teach, and to the relationships within which they operate.

Relevance. In this study, the perception of the relevance of the training and model was related to the degree and direction of teacher change. Through the process of attention-focusing, individuals ignore those stimuli that they judge to be irrelevant and give other more relevant stimuli further attention. Relevance is enhanced when a recommended change is perceived as important and not trivial, and when it is congruent with previously established beliefs.

The implication for persons in staff development is that the relevance of the proposal must be established for each participant. It is not enough for the program to be grounded in theory and research. Trainers must be prepared to convince teachers that the procedure is valid and useful in each specific role and setting. Providing examples from all applicable contexts can help establish credibility and relevance. Since special educators have a perception of themselves as very unique, this establishment of

relevance becomes critical. As trainers and participants seek to define the applicability of the training model in the resource room, both parties need the opportunity to confront and interact with the change proposal and in doing so to modify, adapt, and see new aspects of it. The concept of teaching as decision making is enhanced as participants are empowered to work out the meaning, or relevance, of the change in unique contexts.

Relevance is an issue at all stages in the change process. Planners must assure that relevance is established early in the process if participants are to be receptive. Prior to training, the identification of individuals for whom relevance is thought to be a concern due to incongruent beliefs or unique contexts permits special attention and support to be provided even before training commences. During the training and implementation phases, trainers and coaches need to be aware of the multiple realities in which teachers work and that a given model may need to be adapted in a specific context in order to increase the sense of relevance and promote acceptance. Finally, relevance remains an issue during the maintenance stage as the concepts evolve and become adapted. It must be accepted that context-specific conditions may dictate re-formulation of the change to enhance utility in that site.

Mutual adaptation. The alteration of components in a plan or model to fit real situations, accompanied by change at the site itself, is called mutual adaptation. Trainers need to encourage innovation and change at the grass-root level. This leads to a sense of empowerment as professionals are encouraged to develop and refine procedures that have been presented in staff development efforts. The idea that a single reality exists that can be exported to all sites in a school district is fallacious. The recognition of

multiple realities and the adaptations that are required in particular contexts enhances the probability of change.

In this study, the teachers were presented with the PET model as a single reality. In most sites, there was no special support provided for modification in unique contexts, and the result was non-adoption by these teachers. The one teacher who mentioned that modifications were possible and accepted was one of the few that actually incorporated a significant part of the model into her everyday procedures. The pressure for change in our schools must not be allowed to eliminate the possibility for individual response, interaction, and modification.

Support. Change is almost always difficult. Teachers in a change process need support from their environment in that effort. Significant program alterations may be required of resource room teachers if they are to apply new techniques to their teaching environment. Many of the teachers in this study expressed frustration about administrators and trainers who do not "understand that our situation is different." For teachers who are having difficulty seeing the relevance of a new model of teaching in their contexts and yet feel pressure to adopt it, additional support from administrators or follow-up problem solving groups may be helpful. Two means of providing support are (a) discussion with peers about what can be done to make resource room programs more effective, and (b) non-evaluative observation and conferencing, possibly involving peer coaching. Although the literature supports the applicability of the principles included in this staff development training to resource programming, extra support will be necessary before these teachers will perceive the relevance of the model and make adaptations in their programs.

In the past, the teachers in the sample have experienced benign neglect for the most part. They indicated that they do not have much direction or interference from those outside their room. They interpreted this as permission to keep on "doing their own thing." However, the expenditure of time and money on PET training and other staff development is largely wasted unless there is follow-up and support to encourage teachers to effectively interact with the concepts promoted by the training.

Integration and communication. Finally, the sense of difference and isolation that pervaded discussions with these teachers is troubling. Special education programs cannot hope to be effective in helping their learners function in the mainstream if their teachers are divorced from the total school community. Teachers and administrators need to address the issues of integration of programs and communication between professionals. Staff development and change efforts in general are thwarted when communication is blocked and people work alone with little connection to the ongoing school program. The mutual adaptation process discussed previously does not happen without personal interactions. Problems with communication affect every aspect of public education. They especially hurt efforts to serve students with handicaps. Time and resources spent to provide staff development for teachers and programs for students are wasted unless school professionals actively work to create an environment for effective integration and communication.

Directions for Future Training Efforts

The results of this study indicated the importance of the following modifications to system-wide staff development efforts:

1. Prior to implementation of any staff development program,

the needs assessment process should evaluate not only the need for the training itself but also the current level of performance of individual staff members with respect to the behaviors being promoted. A description of present practices and beliefs of teachers, and achievement levels of students will enable trainers to determine discrepancies which must be addressed by the training.

2. Training processes must be adapted to the contexts in which methods will be used. Incompatible beliefs of teaching staff must be addressed early in the process. Without congruity of belief, substantial adoption and change is unlikely. One means by which teachers may be convinced of the need for change is by evaluating the current performance of students and programs and by demonstrating the enhanced student achievement in that specific context that be expected to result from adoption of the new practices.

3. Trainers must be sensitive to participant reactions which serve as a barometer of change potential. Expressions of negative reaction must be treated seriously since they indicate the likelihood that no change will occur. If teachers are responding negatively, staff developers must (a) modify the training itself in response to criticism, or (b) address the antecedents of change such as underlying beliefs prior to instruction in the actual methods.

4. No staff development model should be administered as a single recipe for all staff in a school or district. Rigid implementation of any model denies basic teacher decision-making in response to unique contexts. Participant attempts to modify procedures to match the needs presented by their teaching situation should be recognized and rewarded. These modifications indicate the adaptive use of a model which should be the goal of any staff

development effort.

The provision of effective staff development is a critical component in the efforts to improve our nation's schools. Staff development implies change, but as this study highlighted, change is not automatically accomplished by the implementation of comprehensive, well-financed training such as the Program for Effective Teaching. Although the PET program is grounded in research on effective teaching practices and is structured in accordance with conceptual models of staff development which takes into account many of the principles of adult learning, it still failed to achieve significant behavior change with most of the special education teachers in this study. This leaves the question, "Why?"

The issue of relevance provides an explanation. These teachers viewed their role as sufficiently unique that it placed them outside the applicability of the model. Staff trainers and change agents must be prepared to counter the "it's all right, but" arguments from teachers with convincing evidence of the value and relevance of their proposals. They must address the very real contextual differences among education professionals and tailor training to match those characteristics. In some cases, a completely different approach to staff development may be required.

These role and setting differences call into question the utility of a uniform state-wide staff development effort that addresses generic teaching competencies only. In seeking the lowest common denominator of pedagogical techniques, such programs run the risk of not really addressing any specific teaching environment with sufficient relevance to promote change. In addition, individual differences in teacher belief and efficacy interact with the

philosophy that guides the training program producing disparate results.

How then can the necessary growth opportunities for teachers be provided? One possibility is active interaction among professionals in a school or district to direct their own development as teachers. As teachers engage in mutual problem-solving and support, drawing on research and consultation as needed, they define effectiveness in terms that are specific to their contexts, including their roles, settings, and content areas. Starting from context-specific problems as a basis for designing change promotes a heightened commitment to that change. Practices such as peer coaching, teacher assistance teams, collaborative consultation, and cooperative learning all can be utilized. The problems of isolation, the "they vs. us" syndrome, and the lack of integration and communication that characterize the special-regular education relationship may also be addressed by this process. This change from an "outside-in" model to one of professional empowerment recognizes and capitalizes on the multiple perspectives and complex realities which exist in the public schools. Staff development then can truly become professional development with enhanced learning for students the ultimate outcome.

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